

WHAT IS CLAIMED IS:

1. An intensive machine performing a plurality of processes in a series of steps of fabricating a multilayer substrate, 5 comprising:
  - a roll of insulating sheet formed into an insulating layer of each of a plurality of layers of the multilayer substrate;
  - an adsorbing and conveying table adsorbing the sheet fed out of the roll by an air suction force and holding the adsorbed sheet, the table further conveying the sheet while holding the sheet;
  - an intensive platform supporting the adsorbing and conveying table so that the table is reciprocally moved in a conveying direction of the table and a direction opposed to the 15 conveying direction;
  - a via hole forming apparatus provided on the intensive platform for forming a via hole in the sheet held on the table in an adsorbed state;
  - a filling and printing apparatus provided on the platform 20 so as to be disposed over the sheet having passed the via hole forming apparatus by a feeding operation of the table to fill the via hole with a conductor paste and print the conductor paste on the sheet; and
  - a wiring pattern printing apparatus provided on the platform 25 so as to be disposed over the sheet having passed the filling and printing apparatus by a feeding operation of the table to print a wiring pattern on the sheet.

2. An intensive machine according to claim 1, further comprising a via hole inspecting apparatus provided between the via hole forming apparatus and the filling and printing apparatus for inspecting a failure in the via hole and a filling and printing 5 inspecting apparatus provided between the filling and printing apparatus for inspecting quality in the filling and printing of the via hole.

3. An intensive machine according to claim 1, wherein 10 distances between the via hole forming apparatus, the filling and printing apparatus and the wiring pattern printing apparatus are set so that steps of via hole forming, filling and printing, and wiring pattern printing are carried out simultaneously.

15 4. An intensive machine according to claim 1, wherein the sheet is a ceramic green sheet formed on a carrier film, and the via hole forming apparatus forms the via hole only on the ceramic green sheet so that the via hole is prevented from extending through the carrier film.

20 5. An intensive machine according to claim 1, wherein the adsorbing and conveying table has a top comprising a laminated porous plate made by laminating at least two metal plates each having a number of minute pores, the metal plates are laminated 25 so that the pores of the upper metal plate face the pores of the lower metal plate and the pores of the upper metal plate are smaller than the pores of the lower metal plate so that air is sucked through the pores of the laminated porous plate to the

lower metal plate side, whereby the sheet is adsorbed and held on the laminated porous plate.

6. An intensive machine according to claim 1, wherein:  
5 the adsorbing and conveying table includes a take-in side and a take-out side on both of which adsorbing fixed tables are provided respectively;

the adsorbing and conveying table is moved reciprocally between the take-in and take-out side adsorbing fixed tables,  
10 thereby conveying the sheet;

the sheet is released from adsorption by each of the take-in and take-out side adsorbing fixed tables when conveyed while adsorbed on the adsorbing and conveying table;

the sheet is released from adsorption by the adsorption and  
15 conveying table when the adsorption and conveying table is moved backward to the direction opposite the conveying direction; and

the sheet is adsorbed by the take-in and take-out side adsorbing fixed tables so as to be prevented from shifting.

20 7. An intensive machine according to claim 6, wherein the take-out side adsorbing fixed table includes a top inclined downward toward the take-out side.

8. An intensive machine according to claim 1, further  
25 comprising:

a feed roller catching the sheet fed from the adsorbing and conveying table so that the sheet hangs down on the feed roller;

a tensioning apparatus including a clamping unit and

suspended on widthwise ends of the sheet hanging down from the feed roller by the clamping unit, thereby tensioning the sheet;

a raising apparatus raising the tensioning apparatus; and

a control device controlling the clamping unit of the

5 tensioning apparatus and the raising apparatus,

wherein every time the tensioning apparatus is descended to a predetermined descending position, the control device releases the clamping unit from a clamping state and controls

the raising apparatus so that the tensioning apparatus is raised

10 to a predetermined ascending position and thereafter, controls

the raising apparatus so that the clamping unit clamps the widthwise ends of the sheet so that the tensioning apparatus is

suspended on the widthwise ends of the sheet.

15 9. An intensive machine according to claim 8, wherein the control device controls so that raising the tensioning apparatus to the predetermined ascending position is carried out during stop of the adsorbing and conveying table.

20 10. An intensive machine according to claim 9, further comprising a clamping and fixing apparatus provided over the tensioning apparatus for clamping and fixing the widthwise ends of the sheet, wherein every time the tensioning apparatus is descended to a predetermined descending position, the control

25 device controls so that the widthwise ends of the sheet are clamped by the clamping and fixing apparatus during stop of the adsorbing and conveying table, thereby fixing a position of the sheet, and thereafter releases the clamping unit of the

tensioning apparatus from the clamping state and controls so that the tensioning apparatus is raised to the predetermined ascending position by the raising apparatus, the control device thereafter controlling so that the clamping unit of the 5 tensioning apparatus clamps the widthwise ends of the sheet so that the tensioning apparatus is suspended on the widthwise ends of the sheet, and thereafter releasing the clamping and fixing apparatus from the clamping state.